

MEETING OF THE CDC BOARD OF SCIENTIFIC COUNSELORS, OFFICE OF INFECTIOUS DISEASES

CLIAC LIAISON
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MEETING MAY 2, 2012

- The meeting included reports from BSC food safety and antimicrobial resistance working group including brief updates on dual use research and the affordable care act.
- The focus of the meeting involved three issues of concern to CDC's infectious disease centers:
 - Safe water and improved Hygiene (National Center for Emerging and Zoonotic Infectious Diseases (NCEZID))
 - Immunization Infrastructure (NCIRD)
 - Gonococcal Antimicrobial Resistance (NCHHSTP)

OPENING REMARKS

- ◉ Dr. Ruth Berkelman (acting chair) and Dr. Rima Khabbaz called the meeting to order and made introductions.
- ◉ Dr. Khabbaz provided brief updates on bioinformatics and the addition of Bob Cottingham to OID to develop strategic and business plans for bioinformatics.

FOOD SAFETY MODERNIZATION ACT (FMSA) SURVEILLANCE WORKING GROUP

- Drs. Harry Chen and James Hadler (chair) are BSC members are on the working group
- The charge of developing Food Safety Integrated Centers of Excellence was discussed.
 - A funding opportunity has been developed for these centers.
 - Subject to the availability of funds, up to 5 centers of excellence will be designated in September with funding anticipated for FY 2013.

FSMAO SURVEILLANCE WORKING GROUP – PRIORITY RECOMMENDATIONS

- ◉ Evaluating and improving surveillance for foodborne illness.
- ◉ External stakeholder collaboration (including partners from industry, consumer relations groups, and academia)
- ◉ Governmental coordination and integration

FSMA OTHER INCENTIVES

- ◉ Assessing the importance of culture independent diagnostics on foodborne illness surveillance and outbreak investigation.
- ◉ Future topics may include
 - Attribution of foodborne illness
 - Drug resistance in foodborne pathogens
 - Workforce training
 - Use of social media in surveillance of foodborne diseases.

ANTIMICROBIAL RESISTANCE GROUP

- ◉ BSC members Drs. Bob Weinstein AR WG Chair) and Andy Pavia led the group's first meeting May 1, 2012.
- ◉ Topics included providing advice on AR surveillance, prevention and laboratory issues.
- ◉ The working group developed a 2 year agenda including topics as suggested by CDC staff.
 - First incentive was to focus on the prevention of emergence and spread of resistant bacterial and fungal pathogens in humans.

AR WG TWO-YEAR AGENDA

- Focus areas and actions were:
 - Surveillance of antimicrobial resistance
 - Propose criteria for identifying pathogens of greatest public health significance.
 - Propose methods to enhance early detection of emerging resistance.
 - Laboratory methods and diagnosis
 - Propose strategies to enhance lab capacity to provide actionable information for public health response.
 - Propose approaches for ensuring more rapid international sharing of lab data on emergent resistance.

AR WG TWO-YEAR AGENDA (CONT.)

- Antimicrobial stewardship (AS)
 - Propose strategies to reaffirm the value of AS in all settings to promote broader acceptance and adoption.
 - Propose strategies to enhance ownership of judicious antibiotic use among individual prescribers.
- Interventions to prevent transmission
 - Propose strategies to extend the type of successes seen in infection control in acute care into all health care settings and community/ other settings.
 - Propose criteria for assessing the utility and applicability of prevention strategies in different settings

NEXT STEPS

- ◉ CDC staff will provide a meeting summary for review by Working Group members.
 - Members joining the chairs include: physicians, a veterinarian, a lawyer, clinical pharmacists and microbiologists.
 - CDC staff from Office of Antimicrobial resistance will facilitate communication with CDC experts in the divisions.
- ◉ The working group plans to convene by conference call in the next three months
- ◉ Also an in-person meeting will be scheduled for the Fall.

DUAL USE RESEARCH AND H5N1

- ◉ Dr. Harold Jaffe Associate Director for Science presented on dual research of concern: DURC is defined by National Science Advisory Board for Biosecurity as life sciences research that can reasonably be anticipated to provide knowledge, products or technologies that could be misapplied by others to cause harm. NSABB;
http://oba.od.nih.gov/biosecurity/about_nsabb.html
- ◉ Studies were reviewed concerning H5N1 publication and DURC
- ◉ <http://www.nih.gov/news/health/dec2011/od-20.htm>

DUAL USE (CONT.)

- ◉ “In March of 2012 the US National Security Staff issued a new policy on DURC that requires federal departments and agencies that conduct or fund life sciences research to review all current or proposed unclassified, intra- or extramural research on proposed Tier 1 select agents, as well as HPAI(H5N1) and the 1918 strain of pandemic flu. Any project that meets the definition of DURC requires development of a risk mitigation plan.”
- ◉ CDC’s dual use policy has been in effect since 2007, and requires determination of dual use potential during the development stage of all CDC research projects.

http://cdc.gov/onsels/lsp/Strategic_Goals/Stewardship/dual_use_research.html

THE AFFORDABLE CARE ACT AND HEALTHCARE TRANSFORMATION

- Dr. Lydia Ogden provided an overview of the Act and its implication to public health.
- The act was designed to:
 - Expand coverage offering new consumer protections and choice, making health care more affordable, improving quality, improving prevention and public health.
- Implications for public health
 - Assuming full ACA implementation, the Congressional Budget Office (CBO) estimates that 92% of non-elderly Americans will have health insurance by 2017.
 - This will reduce the need for public health departments to provide basic care as part of the social safety net.
 - At the same time, ACA has opened up new opportunities to work with medical partners to achieve population health goals.

UPDATES AND PRESENTATIONS FROM NATIONAL CENTERS

- ◉ Dr. Bell provided brief Center updates:
 - ◉ Agreement by State Department that US bound refugees should be vaccinated against measles before US entry
 - ◉ A multistate trial on the impact of targeted use of pesticides in backyards for prevention of tickborne diseases
 - ◉ A pilot project on tribal lands in Arizona to prevent Rocky Mountain spotted fever
 - ◉ Plans to extend NHSN reporting of healthcare-associated infections in 3,400 dialysis facilities
 - ◉ APHL/CDC conference on non-culture diagnostics
 - ◉ Plans to publish lessons learned from the 2011 outbreak of *Listeria* associated with cantaloupes.

SAFE WATER AND IMPROVED SANITATION

- Dr. Michael Beach provided an overview of the NCEZID global water, sanitation, and hygiene (wash) program

<http://www.ded.gov/healthywater/global/>

- Objectives include:
 - Making water safe to drink and use
 - Improving hygiene and sanitation
 - Responding to complex international emergencies and outbreaks
 - Identifying and characterizing disease
 - Education, training and health promotion about global water, sanitation, and hygiene.

IMMUNIZATION INFRASTRUCTURE

- Dr. Anne Schuchat provided Center updates
- Dr. Wharton provided and a brief overview of the immunization infrastructure, including discussion on vaccines for children who are Medicaid- eligible, uninsured, or underinsured

NCHHSTP UPDATES & GONOCOCCAL ANTIMICROBIAL RESISTANCE

- Dr. Kevin Fenton provided an update on HIV, hepatitis, and therapy for latent TB.
 - <http://www.cdc.gov/hiv/topics/funding/PS12-1201/>
 - <http://hivtest.cdc.gov/stronger/about/index.html>
 - www.cdc.gov/hepatitis/HS-ActionPlan.htm
 - <http://www.cdc.gov/nchhstp/newsroom/LatentTBPressRelease.html>
 - <http://www.cdc.gov/nchhstp/atlas/>

GC ANTIMICROBIAL RESISTANCE

- ◉ Dr. Gail Bolan described the growing threat of GC resistance and how to address it.
- ◉ 600,000 US cases per year ranks it second in reportable illnesses.
- ◉ Resistance to sulfa, penicillin, tetracyclines, and most recently quinolone drugs
- ◉ In 2010 CDC recommended dual therapy with ceftriaxone and either azithromycin or doxycycline.
- ◉ Cephalosporin resistance has been noted especially in MSM

IN MY OPINION

- ◉ For practical purposes, the incidence of gonococcal resistance may be skewed since the primary diagnostic method for most patients is PCR and susceptibility testing is not performed.
- ◉ Rectal and or oral or cases of abuse are the other samples tested primarily by culture. The number of these cases are drastically smaller than those evaluated from the genital tract by PCR.
- ◉ A need exists to apply culture based screening to a broad number of infected patients to get a more accurate representation of the incidence of resistance.

CDC RESPONSE TO THE GROWING THREAT OF GC RESISTANCE INCLUDES

- ◉ Working with domestic and international partners to raise awareness of the problem of gonococcal resistance, globally and among clinicians
- ◉ Improving education of both providers and patients about prevention of disease.
- ◉ Expanding local and regional GC laboratory capacity
- ◉ Enhancing global collaboration
- ◉ Updating the 2010 GC treatment guidelines
- ◉ Promoting identification of new treatments.